

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Kristin Feeley et al.	Art Unit	: 3763
Serial No.	: 10/786,021	Examiner	: Catherine Williams
Filed	: February 26, 2004	Conf. No.	: 2923
Title	: ANTIMICROBIAL AGENT DELIVERY SYSTEM		

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REPLY TO ACTION OF SEPTEMBER 13, 2006

In reply to the Office Action mailed September 13, 2006, Applicants submit the following remarks. Claims 1-6 and 9-20 are pending, with claims 6, 9-11, 13 and 20 being withdrawn from consideration.

The Examiner rejected claims 1-5, 12, and 14-19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,726,658 ("Hochman") in view of U.S. Publication No. 2003/0175323 ("Utterberg"), U.S. Publication No. 2003/0212373 ("Hall"), and/or further in view of U.S. Patent No. 5,419,766 ("Chang").

Claims 1-5, 12, and 14-19 cover antimicrobial agent delivery systems that include a delivery tube having a perforated longitudinal partition with an opening. Hochman does not disclose such a delivery system. Nor is there any suggestion to modify Hochman to provide the delivery system covered by claims 1-5, 12, and 14-19. Instead, Hochman discloses an IV catheter delivery device including a barrel 12 having a longitudinal slot 24. (See, e.g., Hochman, col. 3, lines 54-55 and Figs. 6 and 6A.) A control member 100 is disposed in slot 24, and control member 100 can translate in slot 24 in order to insert a needle 54 and a catheter 52 into a vein.

(See, e.g., id., at col. 5, lines 5-9, col. 6, lines 12-15 and 24-35 and Figs. 1-5 and 7.) Slot 24 has a front key 30 and a rear key 32 which can interact with tabs 112 and 116 on control member 100, respectively, to lock a catheter assembly 21 in either an extended or retracted position. (See, e.g., id., at col. 5, lines 41-44 and col. 6, lines 2-11 and Figs. 1, 6A and 7.) The delivery device also includes a spring 23, which can force the catheter and needle assembly to retract when the control member is unlocked from the front key. (See, e.g., id., at col. 6, line 65-col. 7, line 1.)

As would be understood by one skilled in the art after reading Hochman, the delivery device is formed of a material that is rigid so that the device can sustain the force used to inject a needle into skin and tissue. Further, as would also be understood by one skilled in the art, the delivery device should also be able to withstand the force generated when the spring rebounds to retract the needle assembly. Thus, one skilled in the art would understand that the barrel is formed of a hard material that can withstand these forces, and also to enable the control member to be locked into the rear and front keys of the barrel. Indeed, Hochman states that the barrel is preferably made of a plastic material and suggests an acrylic-based multipolymer, such as Cyrolite #GS-90, (see, e.g., id., col. 3, lines 65-67), which is a rigid plastic. (See, e.g., [www.ides.com/grades/ds/E34222.htm](http://www.ides.com/grades/ds/E34222.htm) (copy enclosed)). Accordingly, one skilled in the art would not have been motivated to replace Hochman's slot with a perforated longitudinal partition, because that person would have understood that there would not seem to be any benefit in making such a change in Hochman's device in view of the rigid materials that would be used in the device, and also because the resulting device may not seem work in the manner described by Hochman.

Without conceding that, even if one skilled in the art had somehow been motivated to modify Hochman's device, that person would not have considered Utterberg, Hall or Chang, because none of these references, alone or in combination, cure Hochman's deficiencies.

Neither Utterberg nor Chang discloses or suggests perforated longitudinal partition with an opening. Hall discloses a perforated flexible peel-away sheath for a catheter that is not susceptible to kinking and that efficiently transfers torsional loads throughout the sheath. (See, e.g., Hall at Abstract and paragraph [0008].) Hall discloses PEEK and PEBAX as exemplary

materials. (Id. at paragraph [0048].) One skilled in the art would not have been motivated to use Hall's peel-away sheath in Hochman's device for the reasons noted above in the discussion regarding Hochman's device, as well as the fact that Hall's system is designed for a very different use relative to Hochman's system.


None of Hochman, Utterberg, Hall or Chang, alone or in combination, discloses or suggests the subject matter covered by claims 1-5, 12 and 14-19. There is no suggestion to combine these references to provide such subject matter, and, even if these references were combined, the result would not be the subject matter covered by these claims. Applicants therefore request reconsideration and withdrawal of the rejection of claims 1-5, 12, and 14-19.

Applicants believe the application is in condition for allowance, which action is requested.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 12/7/06

  
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CYROLITE GS-90 by CYRO Industries is a Acrylic (PMMA) (Acrylic, Polymethyl Methacrylate) plastic material.

**General Information****General**

Material Status	• Commercial: Active
Availability	• North America
Test Standards Available	• ASTM
Features	<ul style="list-style-type: none"> <li>• Clarity, High</li> <li>• ESCR, High (Stress Crack Resist.)</li> <li>• Radiation Resistant</li> <li>• Rigidity, High</li> <li>• Sterilizable, Radiation</li> <li>• Toughness, Good</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Appliances</li> <li>• Medical Applications</li> <li>• Toys</li> </ul>
Forms	• Pellets

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**Agency Rating**

This plastic material has 3 certifications from the following agencies (the number in parentheses shows the number of certifications for that agency): USP (1), FDA (2). This is just a summary of complete data available in IDES' [Prospector](#).

**Features (Alternate Representations)**

High Clarity, Good Toughness, Tough, High Rigidity, High Environmental Stress Cracking Resistance, High ESCR, Stress Cracking Resistant, Radiation Sterilizable.

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